

1979 MTT-S MICROWAVE CAREER AWARD

For contributions to waveguide, antenna, non-reciprocal and laser devices.

A. Gardner Fox was born in Syracuse, New York on November 22, 1912. He received the B.S. and M.S. degrees in electrical engineering from the Massachusetts Institute of Technology, Cambridge, in 1935.

He has been a member of the technical staff of the Bell Laboratories since 1936. His early work was concerned with shortwave radio transmitters and an early radar project. In 1939, he joined the Radio Research Department at the Holmdel Laboratory where he engaged in research on waveguides. During World War II he was concerned with the design of microwave radar antennas and filters at the Whippany Laboratory. In 1944, he returned to Holmdel where he took part in the pioneering of the Bell System's first microwave radio-relay system, and later engaged in millimeter wave research. From 1953, he was in charge of the Department of Microwave Physics doing device research on ferrites, dielectrics, and semiconductors. In 1959, he became interested in the efforts to produce an optical maser, and turned his attention to the theory of optical resonators. He then headed the Department of Coherent Wave Physics which has been involved in research on lasers, modulators, and nonlinear optics. Since February 1976 until his retirement in 1978, he was head of the Department of Radio Systems Research. He holds 53 patents in the microwave and quantum electronics fields.

Mr. Fox has served on a number of IEEE technical and conference committees. He was an Associate Editor of the IEEE Journal of Quantum Electronics from 1965 to 1970, and served as its Editor until 1977. He was made a Fellow of the IRE in 1956 for his microwave contributions, and in 1977 was elected a Fellow of the Optical Society of America. In 1978, he was the recipient of the first Quantum Electronics Award given by the IEEE Quantum Electronics and Applications Society.

